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# State of Utah

## DEPARTMENT OF NATURAL RESOURCES

MICHAEL R. STYLER  
Executive Director

### Division of Oil, Gas and Mining

JOHN R. BAZA  
Division Director

July 31, 2008

Dr. James Patten  
Red Leaf Resources, Inc.  
6985 Union Park Center Ste 375  
Cottonwood Heights UT 84047

Subject: Amended Notice of Intention, Red Leaf Resources, Southwest #1, S/047/0055, Uintah County, Utah

Dear Mr. Patten:

On March 19, 2008, the Division received your amended Exploration Notice of Intent for the Southwest #1 project, an additional \$30,700.00 reclamation surety and amended Reclamation Contract.

**You may commence with exploration activities as outlined.** Please be advised that you are bound by the same mining and reclamation standards as outlined in the original exploration notice of intention and must receive written acceptance from this office and SITLA, prior to creating any additional disturbance.

Your exploration notice is valid for the 2008-2009 exploration season. If any of the proposed exploration is not completed before November 30, 2009, you must inform the Division in writing, of your intention to carry work on the project over into the next field season, and provide justification to do so. You may request this on the minerals progress report form, which is required at the end of the exploration season.

. Thank you for your cooperation. When in the area, a member of the Division staff will examine the site. In reply, please refer to file number E/047/0055.

Sincerely,

Dana Dean P.E.  
Associate Director - Mining

DD:lah:eb  
TASK #2278  
Attachment: Approved EXP amend  
Enclosure: Copy of RC modification  
P:\GROUPS\MINERALS\WP\M047-Uintah\E0470055-Southwest1\final\amend-accept\_E0470055.doc



AMENDED NOTICE OF INTENT  
TO CONDUCT EXPLORATION  
ML 50150

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DIV. OF OIL, GAS &amp; MINING

Red Leaf Resources, Inc. (Red Leaf) provides amended description of its activities as an Amendment to its Notice of Intent to Conduct Exploration on trust lands managed by the State Institutional Trust Lands Administration (SITLA) that was filed pursuant with R850-22-700 and R850-22-800 and approved on October 24, 2007 by the Utah Division of Oil Gas and Mining (DOGM). A copy of this amended information is provided to both SITLA and the Utah Division of Oil Gas and Mining.

Red Leaf offers the following amended information in the order requested in the SITLA Notice of Intent instructions and consistent with the format of the originally filed description.

1. The subject of this Notice is mineral lease ML 50150, owned by Red Leaf Resources, Lessee, Inc., 6985 Union Park Center, Suite 375, Cottonwood Heights, Utah 84047. The lands proposed for exploration in this Notice are located in the NE  $\frac{1}{4}$ , NE  $\frac{1}{4}$ , SW  $\frac{1}{4}$ , of Section 30, Township 13 South, Range 23 East, SLB&M. A location map showing the area proposed for exploration and the proposed access road was previously provided as Attachment A to the NOI filing.
2. The extraction work proposed on the exploration site will be conducted by Caterpillar 330 excavators, Caterpillar D8 and D10 bulldozers, and Caterpillar 966 front-end loaders. The contact information for the excavation contractor is Nile Chapman Construction, Roger Chapman (435-722-3800).
3. No privately owned surface land will be affected by the proposed exploration activities.
4. Uintah County zoning regulations show the proposed exploration area to be within the M&G-1 zone. Underground and surface mining are conditional uses within the M&G-1 zone. Red Leaf has received a Conditional Use Permit from Uintah County.
5. A copy of the Notice of Intention to Conduct Exploration filed with the Utah Division of Oil, Gas and Mining (DOGM) was provided to SITLA with Red Leaf's original NOI.
6. The mineral deposits to be explored are oil shale deposits. The proposed activities include excavating a trench or series of pits within the exploration site to obtain bulk samples of the overburden materials and oil shale ore for laboratory and on-site testing purposes. The depth from the surface to the top of the oil shale deposits on the site is approximately 15 feet. The oil shale deposits of interest are approximately fifteen feet in thickness within the exploration area.
7. The topography of the exploration area is a relatively flat knoll, sloping away to the south and west. The oil shale deposits crop out at the surface in the Northeastern portion of the exploration site. Part of the purpose of the exploration activity is to characterize the on-site soils for operational and reclamation purposes. The vegetative cover on the site is predominantly a grass/sagebrush community with interspersed stands of juniper. No water bodies or perennial or intermittent streams are present on the site.
8. No structures are present on the exploration site. The closest maintained road is the Canyon Reservoir Road, lying approximately  $\frac{1}{4}$  mile to the Northwest. There is a non-maintained two-track road, approximately ten (10) feet in width, from the Canyon

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100001

Reservoir Road to the Northwestern corner of the proposed exploration site. The two-track road is approximately ¼ mile in length.

9. No pre-existing, un-reclaimed, surface or underground mining disturbances are located on the site.
10. The proposed exploration activities include improvement of the existing two-track road from the Canyon Reservoir Road to the exploration site. Red Leaf plans a trench 30 feet wide by 130 feet long and approximately twenty-five (25) feet in depth on the exploration site. The purposes of the exploration are to obtain bulk samples of both the overburden materials and the oil shale ore for laboratory and/or on-site testing. The equipment proposed to be used includes the following: on-site power generation, a series of six (6) propane-fired burners, and ancillary support equipment including tanks, pumps, etc.
11. The total area of the proposed improvement to the two-track road is estimated to be ¼ acre, which includes the existing disturbance. Red Leaf has indentified an exploration area approximately ten acres in size. The actual area of disturbance anticipated on the exploration site is 4.7 acres. Disturbances are inclusive of all areas needed for equipment, staging, stockpiling, processing, and structures on the site.
12. Attachment A provided with the original NOI showed the exploration site and proposed improved two-track road at a scale of 1" = 1000 ft. A site map showing the approximate location of the proposed 30X130 ft. trench and associated disturbance on the site is attached to this document as Revised Attachment C. The exploration project configuration of excavations, equipment, and structures on the site is also shown on Revised Attachment C.
13. No specific markets, haul routes, production targets, sales prices, or annual sales have yet been determined.
14. Red Leaf will report the volumes and tonnage of all ore materials and products of testing removed from the lease.
15. Red Leaf has not yet prepared an operational reclamation plan for mining operations on the exploration site. Red Leaf has, however, committed to the exploration operation and reclamation practices specified on Rules R647-2-107, 108, and 109 as enumerated in the previously filed DOGM Notice of Intent to Conduct Exploration. (Attachment B to the original SITLA NOI filing) No variance from these requirements has been requested. Red Leaf has also executed an Exploration Reclamation Contract (Copy Attached as Attachment D in the original NOI) and posted cash reclamation surety with the Treasure the State of Utah in the amount of \$20,700. **Red Leaf is providing an additional \$10,000 surety with this revised NOI.**

The Chief Executive Officer and President of Red Leaf Resources, Inc. is Dr. James Patten. His telephone contact is 801-878-8100 and his email address is [jpatten@ecoshale.com](mailto:jpatten@ecoshale.com). The contact person for this filing is Dr. Laura Nelson, Vice President Energy & Environmental Development. Her telephone contact is 801-878-8105 and email is [lnelson@ecoshale.com](mailto:lnelson@ecoshale.com).

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Salt Lake City UT U.S.A.  
84107  
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Notes

Revision

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File Name

Permit-Seal

Drawn: \_\_\_\_\_ Chkd: \_\_\_\_\_ Dgn: \_\_\_\_\_

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**JUL 2 0 2008**

**DIV. OIL GAS & MINING**

Client/Project

RED LEAF RESOURCES, INC  
COTTONWOOD HEIGHTS, UT

OIL SHALE  
KEROGEN EXTRACTION

Salt Lake City UT U.S.A.

Title

Uintah County, UT U.S.A.  
TEST CAPSULE  
MASS EXCAVATION

Project No.

1862350600

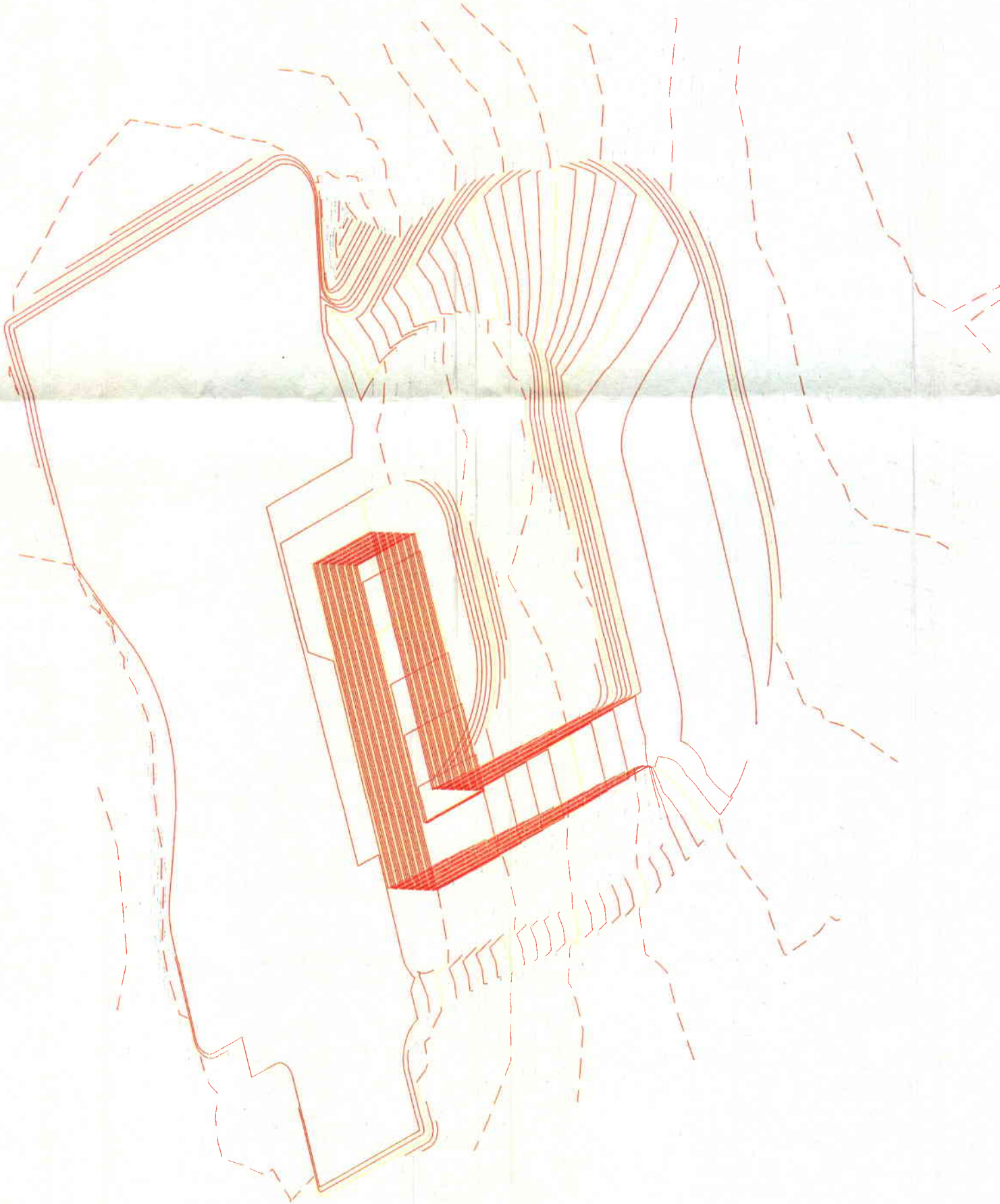
Scale

1" = 20'

Drawing No.

Sheet

Revision





Rensed Attachment C

Stantec Consulting Inc.  
Suite 300, 3925 South 700 East  
Salt Lake City UT U.S.A.  
84107  
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Legend



EXPLORATORY BORE HOLE

Notes

C1, C2, RA = EXPLORATORY BORE HOLES

C1 LOCATION: UTM:  
N: 14405554.052  
E: 2095085.367

Revision	By	Appd.	Yr.	MM.	DD.
0	FOR ANNUAL REPORT				
1	FOR CLIENT REVIEW				
2	FOR ANNUAL REPORT				
3	FOR CLIENT REVIEW				
4	INITIAL ISSUE				

Revision	By	Appd.	Yr.	MM.	DD.
0	FOR ANNUAL REPORT				
1	FOR CLIENT REVIEW				
2	FOR ANNUAL REPORT				
3	FOR CLIENT REVIEW				
4	INITIAL ISSUE				

File Name:

Permit-Sea

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JUL 28 2008

DIV. OIL GAS & MINING

Client/Project

RED LEAF RESOURCES, INC  
COTTONWOOD HEIGHTS, UT  
KEROGEN EXTRACTION PROJECT  
PILOT CAPSULE  
Utah County UT U.S.A.

Title

EXCAVATION PLAN,  
PROFILE &  
SITE FINISHED GRADE

Project No.

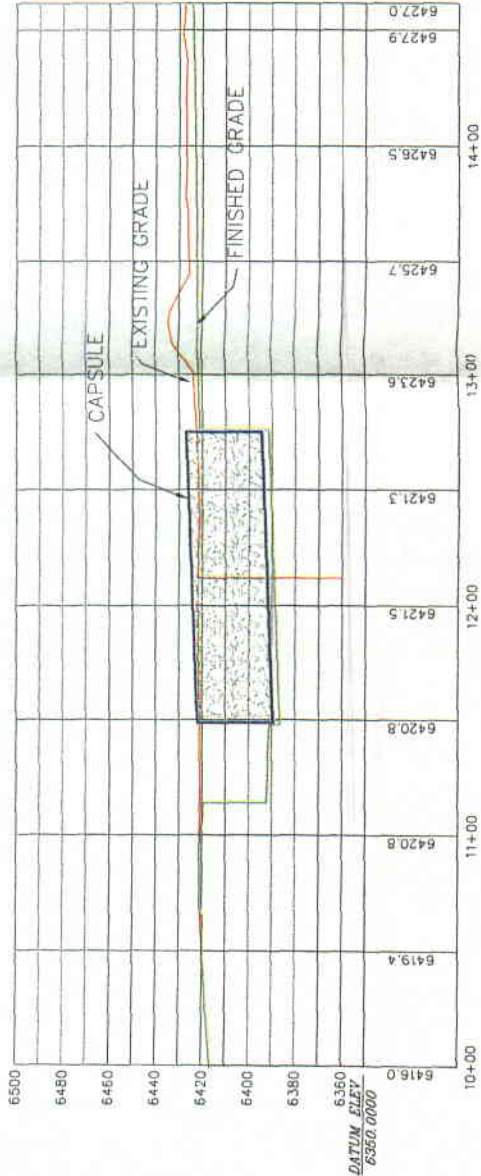
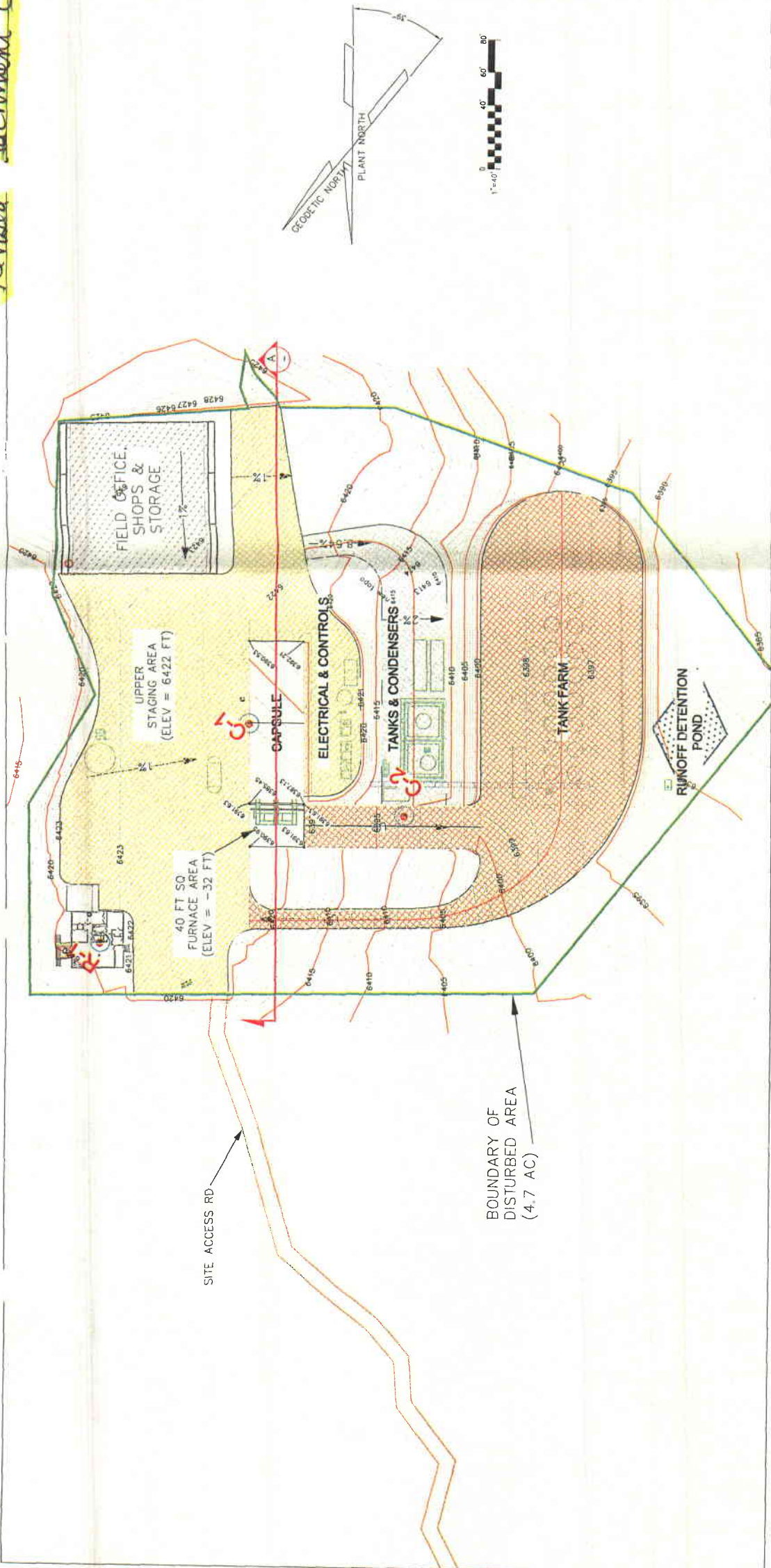
1862350600

Drawing No.

CP-1411

2 of 2

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A SECTION A  
SCALE: 1" = 40'